

# PreAlgebra by Blair, Tobey and Slater

## Practice Test 1

1. (a)  $|-24| = 24$  (b)  $-\sqrt{-32} = -32$   
 (c)  $-\sqrt{13} = -13$
2. (a)  $-10 + (-2) + 7 = -10 - 2 + 7 = -10 + 5 = -5$   
 (b)  $12 - 22 = -10$   
 (c)  $2 + 5 - 8 = 7 - 8 = -1$
3. (a)  $-7 - 2 + (-4) = -7 - 2 - 4 = -13$   
 (b)  $-23 - 2 - (-4) + (-8) = -23 - 2 + 4 - 8 = -25 - 4 = -29$
4. (a)  $-8(-9) = +72$  (b)  $6(-5) = -30$   
 (c)  $(-2)(-7)4 = +2 \cdot 7 \cdot 4 = 8 \cdot 7 = 56$
5. (a)  $\frac{-72}{8} = -\frac{8 \cdot 9}{8} = -9$  (b)  $\frac{0}{9} = 0$   
 (c)  $\frac{-11}{0} = \text{undefined}$  (d)  $\frac{-22}{-2} = +\frac{2 \cdot 11}{2} = 11$
6. A. Commutative  $\longleftrightarrow$  a.  $(m+7)+5 = m+(7+5)$   
 B. Associative  $\longleftrightarrow$  b.  $m+8 = 8+m$   
 C. Distributive  $\longleftrightarrow$  c.  $3m+12 = 3(m+4)$
7. (a)  $10 - 12 \div 6 \cdot (3)^2 + 5$   
 $10 - 12 \div 6(9) + 5$   
 $\times \quad \times$   
 $10 - 2(9) + 5$   
 $10 - 18 + 5 = -8 + 5 = -3$   
 (b)  $\frac{-7 - 13}{[3(-2)^2 + (5)2]} =$   
 $\frac{-20}{3(4) + 10} = \frac{-20}{12 + 10} = \frac{-20}{22} = -\frac{10}{11}$

P✓
E✓
M✓
D✓
A✓
S✓

7. (c)  $1 - (3)^2 - 7 + 4(-2) =$   
 $= -9 - 7 - 8 =$   
 $= -9 - 15 = -24$

$-(3)^2 = -3 \cdot 3 = -9$   
 $(-3)^2 = (-3)(-3) = 9$

M  
 D  
 A  
 S

8. (a)  $6y - 40x + 12xy + 22y - 11x = 28y - 51x + 12xy$

(b)  $3mn - 15m + 11n - 2mn + 8m = mn - 7m + 11n$

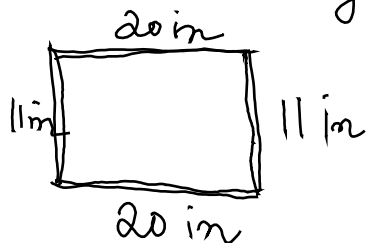
9. (a)  $y^2 + 5y + 1$       $y = (-4)$   
 $(-4)^2 + 5(-4) + 1$   
 $16 - 20 + 1 = 17 - 20 = -3$

$-4^2 = -16$   
 $(-4)^2 = (-4)(-4) = 16$

(b)  $5n - 3m$       $n = (-4)$       $m = (-2)$   
 $5(-4) - 3(-2)$   
 $-20 + 6 = -14$

(c)  $\frac{x^2 + y^2}{-5}$       $x = (-2)$       $y = (1)$   
 $\frac{(-2)^2 + (1)^2}{-5}$   
 $\frac{4 + 1}{-5} = \frac{5}{-5} = -1$

10. Find the perimeter of a picture frame that is 11 in by 20 in.



$P = 2a + 2b$

$P = 2(11) + 2(20)$

$P = 22 + 40$

$P = 62$

$a = (11 \text{ in})$   
 $b = (20 \text{ in})$

The Perimeter of the picture frame is 62 in

Good Luck !